

What is claimed:

1. A composition comprising:
leucine and
5 at least one of isoleucine, lysine, methionine, phenylalanine, threonine, tryptophan, valine or histidine in free and/or salt form,
wherein leucine, in free and/or salt form, is present in an amount of at least 10% to about 35% by weight based on the weight of total amino acids.
- 10 2. A composition comprising:
leucine and
at least one of isoleucine, lysine, methionine, phenylalanine, threonine, tryptophan, valine, or histidine in free and/or salt form,
wherein total leucine is present in an amount of at least about 20% to about 35% by
15 weight based on the weight of total amino acids.
3. A composition comprising:
a) essential and, optionally, conditionally essential amino acids in free form and/or
salt form, and
20 b) intact protein,
wherein total essential and, optionally, conditionally essential amino acids are present in an amount of about 55% to about 75% by weight based on the weight of total amino acids.
4. The composition of claim 3, wherein the essential and, optionally, conditionally
25 essential amino acids comprises leucine and at least one of isoleucine, lysine, methionine, phenylalanine, threonine, tryptophan, valine, or histidine.
5. The composition of claim 4, wherein total leucine is present in an amount of about 20%
to about 35% by weight based on the weight of total amino acids.
- 30 6. The composition of claim 3 further comprising arginine in free and/or salt form in an amount of at least 5% to about 40% by weight based on the weight of total amino acids.

7. The composition of claim 3 further comprising methionine in free and/or salt form in an amount of at least about 0.5% to about 5% by weight based on the weight of total amino acids.
- 5 8. The composition of claim 3, further comprising an n-3 polyunsaturated fatty acid.
9. The composition of claim 8, wherein the n-3 polyunsaturated fatty acid is chosen from α -linolenic acid, eicosapentaenoic acid and docosahexaenoic acid.
- 10 10. The composition of claim 3, further comprising at least about 1 g of eicosapentaenoic acid per serving or at least about 2 g of eicosapentaenoic acid per daily dose.
11. The composition of claim 3, further comprising tocopherol.
- 15 12. The composition of claim 3, further comprising tocotrienol.
13. The composition of claim 11, wherein the tocopherol is present in an amount about 50 mg per serving or at least 150 mg per daily dose.
- 20 14. The composition of claim 3, comprising from about 6 g to about 18 g amino acids in free and/or salt form per daily dose.
15. The composition of claim 3, comprising from about 5 g to about 10 g leucine in free and/or salt form per daily dose.
- 25 16. The composition of claim 3, comprising from about 6 g to about 21 g total essential and/or conditionally essential amino acids per serving.
17. A kit comprising:
- 30 a) a first composition comprising:
- 1) essential and, optionally, conditionally essential amino acids in free form and/or salt form, and
- 2) intact protein,

wherein total essential and, optionally, conditionally essential amino acids are present in an amount of about 55% to about 75% by weight based on the weight of total amino acids; and

b) a second composition comprising an anti-cancer drug.

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18. A method of ameliorating a condition associated with cachexia and/or anorexia comprising the step of:

administering to a human in need of such amelioration a composition comprising

10 a) essential and, optionally, conditionally essential amino acids in free form and/or salt form, and

b) intact protein,

wherein total essential and, optionally, conditionally essential amino acids are present in an amount of about 55% to about 75% by weight based on the weight of total amino acids.

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19. The method of claim 18, wherein the condition is chosen from tumor-induced weight loss and muscle loss.

20. The method of claim 18, wherein the administering is enterally administering.

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21. A method of stimulating muscle protein synthesis comprising the step of:

administering to a human in need of such stimulation a composition comprising

a) essential and, optionally, conditionally essential amino acids in free form and/or salt form, and

25 b) intact protein,

wherein total essential and, optionally, conditionally essential amino acids are present in an amount of about 55% to about 75% by weight based on the weight of total amino acids.

30 22. A method of reducing malnutrition comprising the step of:

administering to a human in need of such reduction a composition comprising

a) essential and, optionally, conditionally essential amino acids in free form and/or salt form, and

b) intact protein,

wherein total essential and, optionally, conditionally essential amino acids are present in an amount of about 55% to about 75% by weight based on the weight of total amino acids.